MINUTEMAN

Sentry II

User's Manual

Table of Contents

INTRODUCTION 4

INSTALLATION 4

- SYSTEM REQUIREMENTS 4
- INSTALLING THE UPS INTERFACE CABLE 4
- WINDOWS 5
  - *Install Procedure* *5*
  - *Starting Sentry II Services* *5*
  - *Connect to Server* *6*
  - *Uninstall Procedure* *7*
- NOVELL NETWARE 7
  - *Install Procedure* *7*
  - *Starting Sentry II Services* *8*
  - *Connect to Server* *9*
  - *Uninstall Procedure* *9*
- UNIX 10
  - *Install Procedure* *10*
  - *Starting Sentry II Services* *11*
  - *Connect to Server* *12*

CONFIGURATION 12

- USER MANAGEMENT 13
- SERVER SETTINGS 13
- UPS CONFIGURATION 14

EVENT CONFIGURATION 15

- EVENT ACTION 15
  - *Paging* *16*
  - *Logging* *17*
  - *SNMP Trap* *18*
  - *Broadcasting* *18*
  - *Email Notification* *19*
  - *UPS and/or Operating System Shutdown* *20*
  - *Run a System Command* *21*

MONITORING 23

- METER 23
- IDENTIFICATION 23
- INPUT 24
- OUTPUT 24
- BATTERY 24
- ALARM 25
- VIEW GRAPHIC 25

UPS CONTROL OPTIONS 27

- CONTROL 27

SCHEDULING 27

- SCHEDULE 27

DATA & EVENT LOGGING 28

- LOG CONFIGURATION 28
- VIEW DATA LOG 30
- VIEW EVENT LOG 31

SENTRY II REMOTE 31
SYSTEM REQUIREMENTS 31
WINDOWS CLIENT 32
Installation *32*
Starting Sentry II Services *33*
NOVELL NETWARE CLIENT 33
Installation *33*
Starting Sentry II Services *35*
UNIX CLIENT 35
Installation *35*
Starting Sentry II Services *37*

INTRODUCTION

Sentry II is a UPS power monitoring application for the Windows 95/98/ME, Windows NT/2000, SCO Unixware/Open Desktop, HP-UX, IBM AIX, Red Hat Linux, and Novell Netware 4.x, 5.x operating systems. Sentry II monitors the UPS through a cable attached to a serial port on the computer, and the communications interface on the UPS. This connection enables Sentry II to check the status of the UPS and to perform a graceful operating system shutdown if required.

Through Sentry II's web browser interface, you can configure shutdown timers and event actions, view and print event logs, and view and print power history graphs and data logs.

You can configure Sentry II to perform appropriate actions when an event is detected. The user configurable actions include: logging, broadcasting, paging, e-mail, command file execution, and UPS and operating system shutdown. You can set the delays and intervals of these actions. For example, if utility power fails, you may wish to log the event, broadcast a warning message, page the system administrator, and shutdown the system after a configured time delay.

The monitoring screen displays readings and meters for the UPS. You can customize which values are displayed.

The UPS readings can be logged for later viewing. You can configure the frequency of the data logging. The event log tracks the history of power and UPS related events. The data log can be viewed, graphed, or printed. The event log can be viewed or printed.

You can schedule specific actions to occur, such as system shutdown and restarts. You can schedule these actions to recur one-time, daily, every weekday, or a specific day of the week. Some actions may not be supported on all UPS models.

INSTALLATION

System Requirements

1. To use Sentry II, your system must be running one of the following operating systems with the TCP/IP protocol:
   - Windows 95/98/ME
   - Windows NT/2000
   - SCO Unixware/Open Desktop
   - HP-UX
   - IBM AIX
   - Red Hat Linux
   - Novell Netware 4.x, 5.x
2. Sentry II requires one dedicated RS-232 serial port on your computer, for communications with the UPS.
3. Sentry II requires an additional dedicated RS-232 serial port on your computer, for paging, if this feature is utilized.

Installing the UPS Interface Cable

Install the UPS interface cable by performing the following steps:

1. Locate the UPS interface cable that was provided with Sentry II, or the UPS. (Part # 35000003)
2. Identify the computer end of the cable. The computer end of the cable will have a part # label attached.
3. Plug the connector at the computer end of the cable into the dedicated serial communications port on your computer. If this end of the cable does not match your serial port connector, use an RS-232 adapter.
4. Plug the connector at the other end of the cable into the interface port on the UPS. (Refer to the UPS user's manual for help in locating the interface port.)

NOTE: Sentry II will look for the UPS on com 1 by default. Com ports 2, 3, or 4 maybe used with minor configuration changes.

Windows

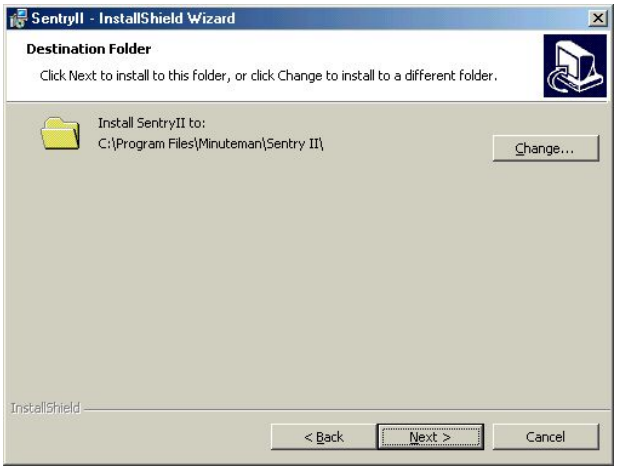
Install Procedure

Step 1. Insert the Sentry II Installation CD and select **Install Software** from the menu. If the autorun feature does not work, run **setup.exe** located in the **{*drive*}:**\\SentryIIServer\Win32 folder on the Sentry II Installation CD. NOTE: Replace **{*drive*}** with the drive letter of the CDROM drive.

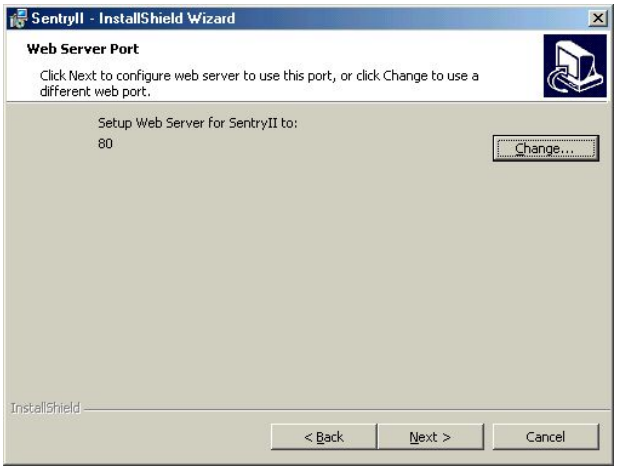
NOTE: When using a Windows NT/2000 server, logon as the administrator to ensure that you have full read and write privileges.

Step 2. The InstallShield Wizard will guide you through the installation process.

Step 3. The default install location is recommended.



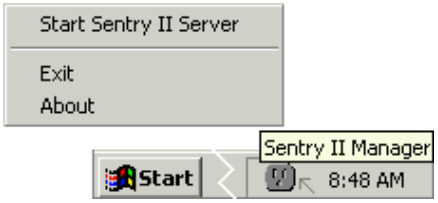
Step 4. The default web server port address is 80. If you are running a standard web server such as IIS or Apache, you may want to change this port address to avoid a conflict.


SentryII - InstallShield Wizard
Web Server Port
Click Next to configure web server to use this port, or click Change to use a different web port.
Setup Web Server for SentryII to:
80
Change...
InstallShield
< Back
Next >
Cancel

Starting Sentry II Services

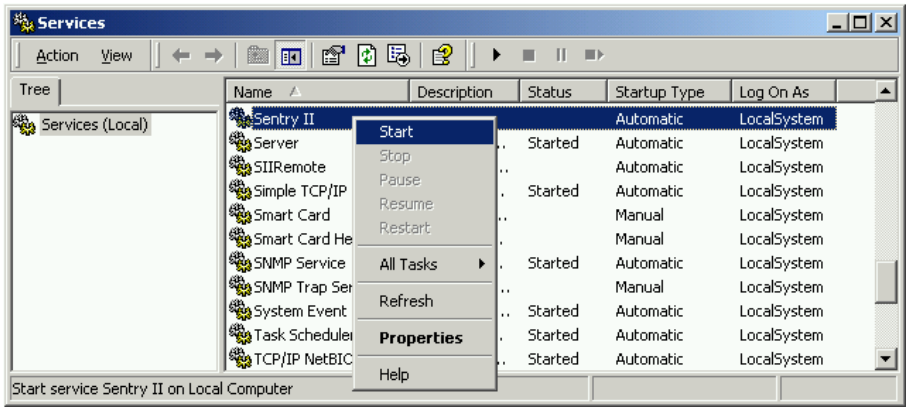
If, at the end of the installation, you selected to start Sentry II, then Sentry II should be running. If not, to start Sentry II, perform the following steps:

- Windows 95/98/ME
  1. From the Windows ***Quick Launch Toolbar***:
  2. Right click on the ***Sentry II Manager*** icon.
  3. From the popup menu, select ***Start Sentry II Server***.



NOTE: If the menu reads ***Stop Sentry II server*** then the server is already running. By default, the Sentry II Manager is placed in the windows Startup folder to run at system startup.

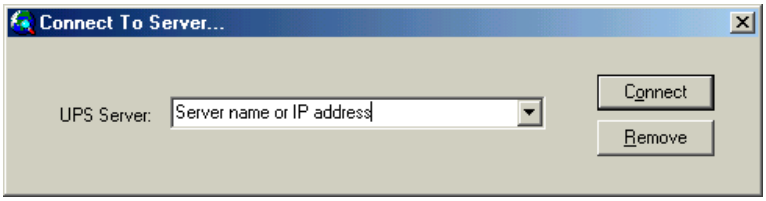
- Windows NT/2000
  1. Start the Windows ***Services*** application.
  2. From the Windows ***Start Menu***, select the ***Settings*** menu, and then select the ***Control Panel*** menu.
  3. Select the ***Administrative Tools*** folder, and then select the ***Services*** application.
  4. Locate the ***Sentry II*** service in the services list.
  5. Right click ***Sentry II*** and select ***Start*** from the popup menu.



Connect to Server

Step 1. To connect to the Sentry II Server, click the Windows **Start** button and select **Programs / Sentry II / Connect to Server**.

Step 2. The following windows will appear. Sentry II will display your computer's default DNS name. If not, then manually enter in either your server name or IP address.



Step 3. Click **Connect** and your default web browser will start. The Sentry II security page will then appear. The default User Name and Password is **admin**.

NOTE: The administrator User Name and Password can be changed from within the **Users** section once Sentry II is connected.

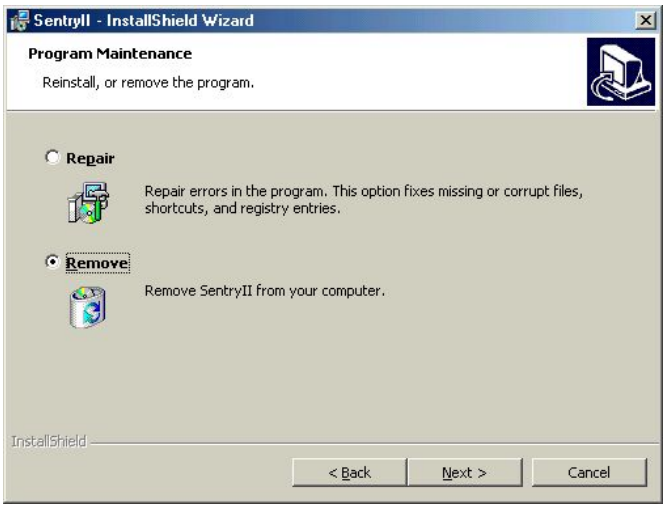
Uninstall Procedure

Uninstall Sentry II by performing the following steps:

Step 1. Open the Windows **Control Panel** and choose **Add/Remove Programs**.

Step 2. Choose Sentry II and click Add/Remove. InstallShield will guide you through the uninstall process.

Step 3. InstallShield can **Repair** or **Remove** Sentry II.


SentryII - InstallShield Wizard
Program Maintenance
Reinstall, or remove the program.
Repair
Repair errors in the program. This option fixes missing or corrupt files, shortcuts, and registry entries.
Remove
Remove SentryII from your computer.
InstallShield
< Back
Next >
Cancel

Step 4. The Sentry II **Data Logs** and **Event Logs** are NOT removed during the uninstall process. They can be located in the C:\Program Files\Minuteman\Sentry II Data and Event folders.

Novell Netware

Install Procedure

Step 1. Sentry II must be installed from a Windows client computer. Before you begin, you will need the name of the Novell Netware server and where the software will be installed. If you do not know the name of the netware server, ask your Novell Netware Administrator.

NOTE: Novell Client32 is **NOT** required, however TCP/IP **is** a necessity for Sentry II.
The Novell server must be running TCP/IP.

Step 2. Map a drive to the netware server's SYS volume. (NOTE: The netware user must have administrator access rights for SYS)

If you do not know how to map a drive, see the following:

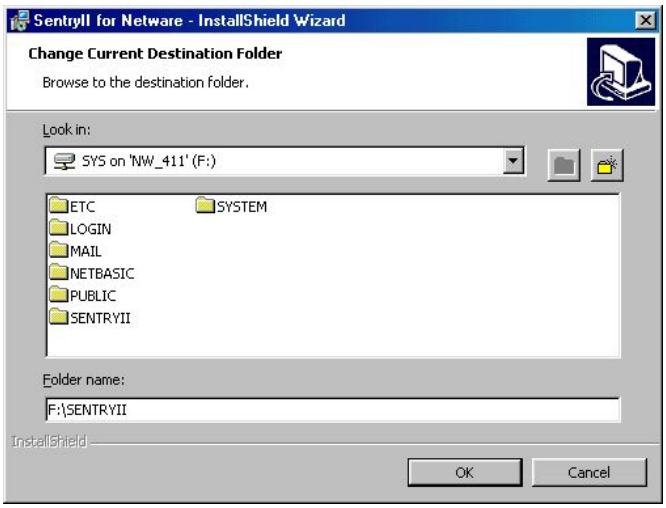
- For Windows 95/98/ME, from ***Help*** on the Windows Start menu, see the index ***map network drive*** *and* ***To assign (map) a drive letter to a network computer or folder****.*
- For NT, from ***Help*** on the Windows Start menu, see the index **mapping network drives**.
- For 2000, from ***Help*** on the Windows Start menu, see the index **mapping drives** and **to network computer or folder**.

NOTE: Make a note of the drive letter selected, as this will be needed later. Also the computername is the NetWare server name and the foldername is SYS. (i.e. \\{computername}\SYS).

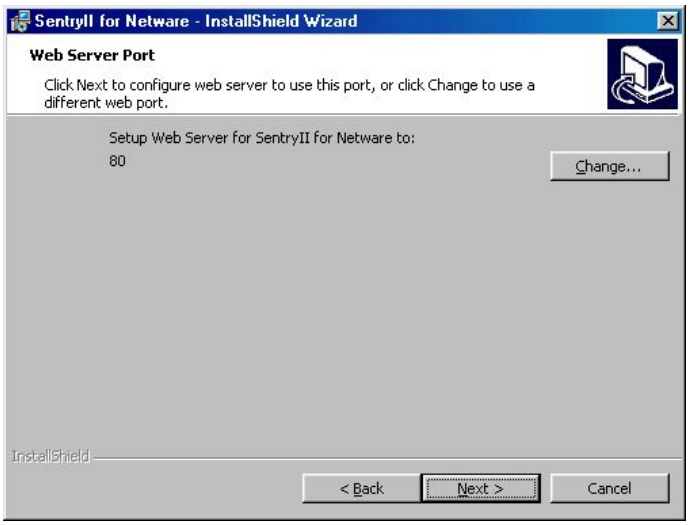
Step 3. Insert the Sentry II Installation CD and select **Install Software** from the menu. If the autorun feature does not work, run **setup.exe** located in the **{***drive***}:**\\SentryIIServer\Netware folder on the Sentry II Installation CD. NOTE: Replace **{***drive***}** with the drive letter of the CDROM drive.

Step 4. The InstallShield Wizard will guide you through the installation process.

Step 5. When prompted for the Sentry II installation folder, select the drive letter mapped in Step 2 and enter a new folder name, a maximum of 8 characters may be used, where the software will be installed. (For example, **F:\SentryII**.)



Step 6. The default web server port address is 80. (NOTE: Novell Netware v 5.1 does have the ability to run a web server, you may want to change this port address to avoid a conflict.)


SentryII for Netware - InstallShield Wizard
Web Server Port
Click Next to configure web server to use this port, or click Change to use a different web port.
Setup Web Server for SentryII for Netware to:
80
Change...
InstallShield
< Back
Next >
Cancel

Starting Sentry II Services

NOTE: The hosts file on the Novell server may need to be altered before the Sentry II service can run properly. This can be done by entering: LOAD EDIT SYS:ETC\HOSTS at the console prompt. The IP address of the server needs to be referenced to the server name.

From the Novell server, start Sentry II by entering the following commands at the console prompt: (NOTE: replace ***InstallFolder*** with the folder name entered in step 5)

LOAD AIOCOMX.NLM
LOAD NETDB.NLM
LOAD SYS:***InstallFolder***\SENTRYII.NLM

Sentry II should now be executing on the Novell Netware server. Within a few minutes, you should see the following messages on the Sentry II display:

Connecting to UPS...
UPS connected successfully.

Sentry II is now running.

NOTE: To execute Sentry II Server at system startup the support NLM files may be placed in the AUTOEXEC.NCF file.

Connect to Server

Step 1. Sentry II must be configured from a Windows client computer. Before you begin, you will need the IP address of the Novell Netware server.

NOTE: TCP/IP **is** a requirement for Sentry II. The Windows client must be running TCP/IP.

Step 2. Start your favorite web browser. Type in the IP address of your server in the Address bar. (Example: http://***ServerIPaddress***)

Minuteman UPS Power Protection and Battery Backup - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites History
Address http:// (Server IP address)

Step 3. The Sentry II security web page will load. The default User Name and Password is **admin**.

NOTE: The administrator User Name and Password can be changed from within the **Users** section once Sentry II is connected.

Uninstall Procedure

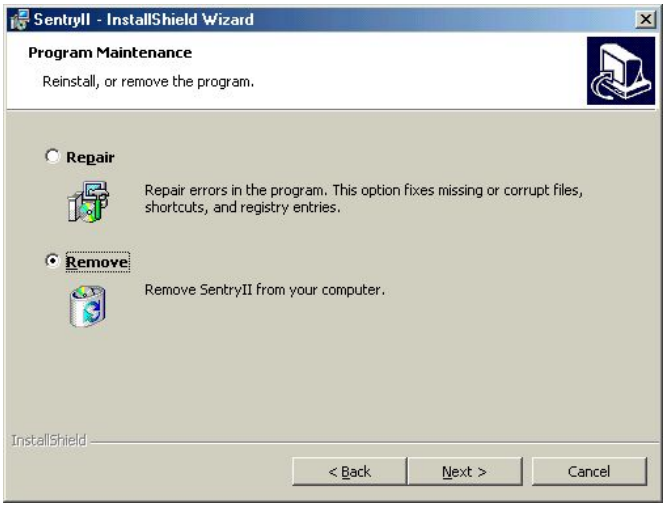
NOTE: Sentry II uninstall must be executed from the same Windows client computer that performed the original installation.

Uninstall Sentry II by performing the following steps:

Step 1. Open the Windows **Control Panel** and choose **Add/Remove Programs**.

Step 2. Choose Sentry II and click Add/Remove. InstallShield will guide you through the uninstall process.

Step 3. InstallShield can **Repair** or **Remove** Sentry II.


SentryII - InstallShield Wizard
Program Maintenance
Reinstall, or remove the program.
Repair
Repair errors in the program. This option fixes missing or corrupt files, shortcuts, and registry entries.
Remove
Remove SentryII from your computer.
InstallShield
< Back
Next >
Cancel

Step 4. The Sentry II **Data Logs** and **Event Logs** are NOT removed during the uninstall process. They can be located in the SYS:***InstallFolder***\Data and Event folders.

Unix

Install Procedure

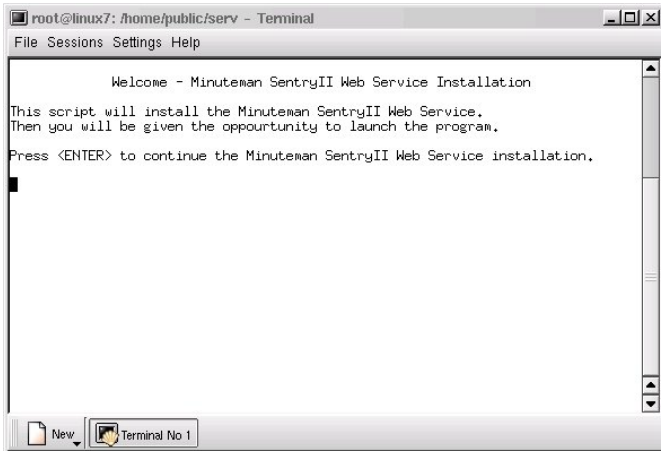
Step 1. You must be logged in to the server as root to ensure that you have full read and write privileges.

- Auto Install: Insert the Sentry II Installation CD into the drive. Mount the CD-ROM drive. Execute the **install** script located in the \SentryIIServer\Unix folder on the Sentry II Installation CD.

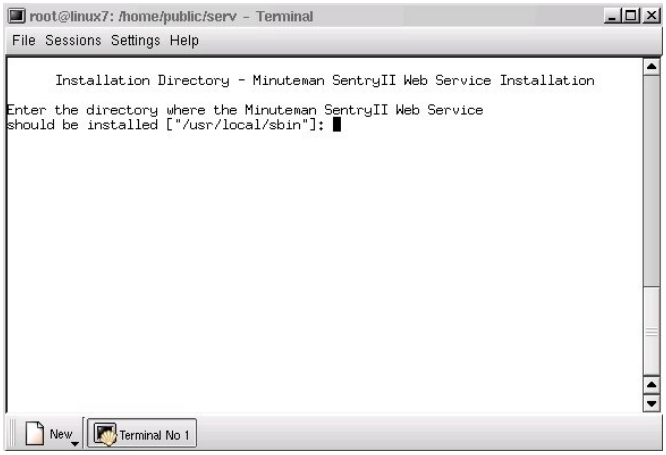
KNOWN ISSUE: The KDE desktop environment running with the Konqueror web browser does NOT work properly with install scripts. For this setup, please use the Manual Install listed below.

- Manual Install: Insert the Sentry II Installation CD into the drive. Mount the CD-ROM drive. Open a terminal windows and go to the **mnt/cdrom/SentryIIServer/Unix** folder. Type **./install** at the command prompt to begin the install process.

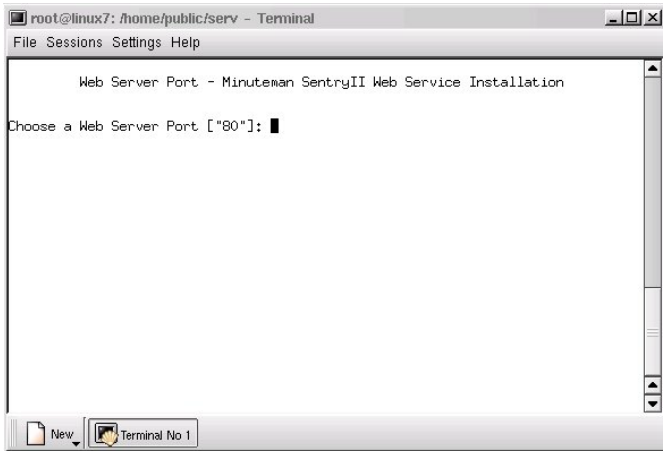
Step 2. The install script will begin.


root@linux7: /home/public/serv - Terminal
File Sessions Settings Help
Welcome - Minuteman SentryII Web Service Installation
This script will install the Minuteman SentryII Web Service.
Then you will be given the oppourtunity to launch the program.
Press <ENTER> to continue the Minuteman SentryII Web Service installation.
New
Terminal No 1

Step 3. All default install locations are recommended.

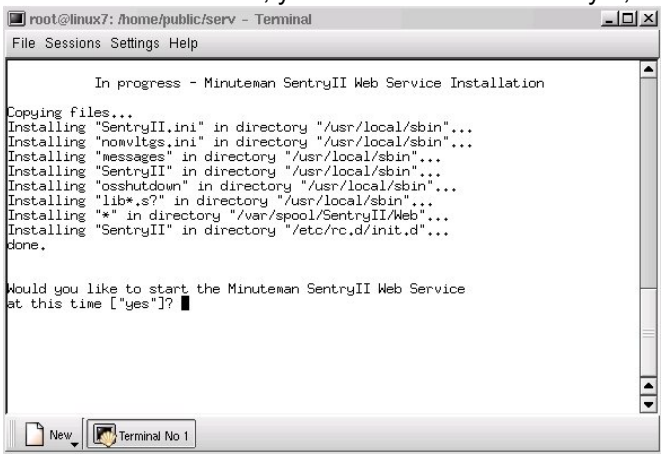

root@linux7: /home/public/serv - Terminal
File Sessions Settings Help
Installation Directory - Minuteman SentryII Web Service Installation
Enter the directory where the Minuteman SentryII Web Service
should be installed ["/usr/local/sbin"]:
New
Terminal No 1

Step 4. The default web server port address is 80.


root@linux7: /home/public/serv - Terminal
File Sessions Settings Help
Web Server Port - Minuteman SentryII Web Service Installation
Choose a Web Server Port ["80"]:
New
Terminal No 1

Starting Sentry II Services

If, at the end of the installation, you selected to start Sentry II, then Sentry II should be running.


root@linux7: /home/public/serv - Terminal
File Sessions Settings Help
In progress - Minuteman SentryII Web Service Installation
Copying files...
Installing "SentryII.ini" in directory "/usr/local/sbin"...
Installing "nomvltgs.ini" in directory "/usr/local/sbin"...
Installing "messages" in directory "/usr/local/sbin"...
Installing "SentryII" in directory "/usr/local/sbin"...
Installing "osshutdown" in directory "/usr/local/sbin"...
Installing "lib*.s?" in directory "/usr/local/sbin"...
Installing "*" in directory "/var/spool/SentryII/Web"...
Installing "SentryII" in directory "/etc/rc.d/init.d"...
done.
Would you like to start the Minuteman SentryII Web Service
at this time ["yes"]?
New
Terminal No 1

If not, please perform the following steps:
To start Sentry II, execute the following commands for your platform:

- HP-UX
  1. cd /sbin/init.d
  2. SentryII start

- SCO Unixware / Open Desktop
  1. cd /etc/init.d
  2. SentryII start

- IBM AIX
  1. cd /etc/init.d
  2. SentryII start

- Red Hat Linux
  1. cd /etc/rc.d/init.d
  2. SentryII start

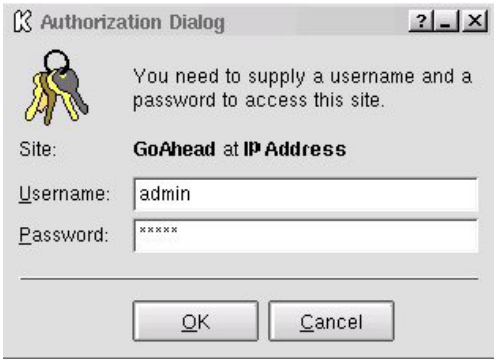
Connect to Server

Step 1. Start your favorite web browser. Type in the IP address of your server in the Address bar. (Example: http://***ServerIPaddress***)

Minuteman UPS Power Protection and Battery Backup - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites History
Address http:// (Server IP address)

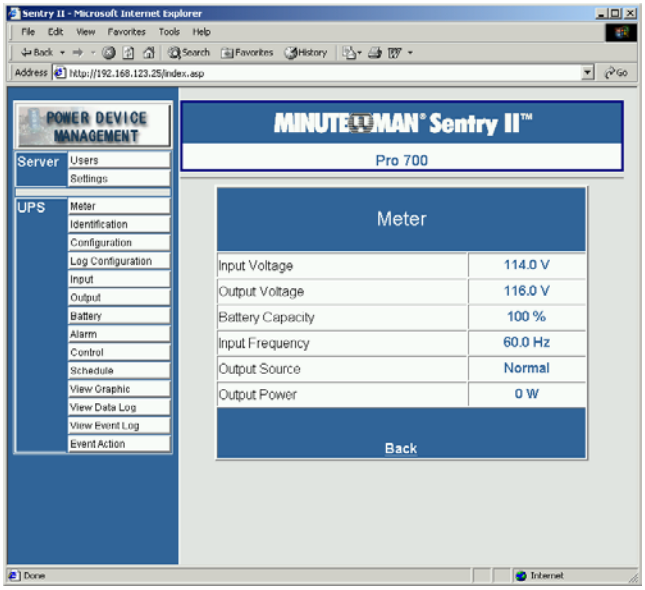
Step 2. The Sentry II security web page will load. The default User Name and Password is **admin**.

NOTE: The administrator User Name and Password can be changed from within the **Users** section once Sentry II is connected.



CONFIGURATION

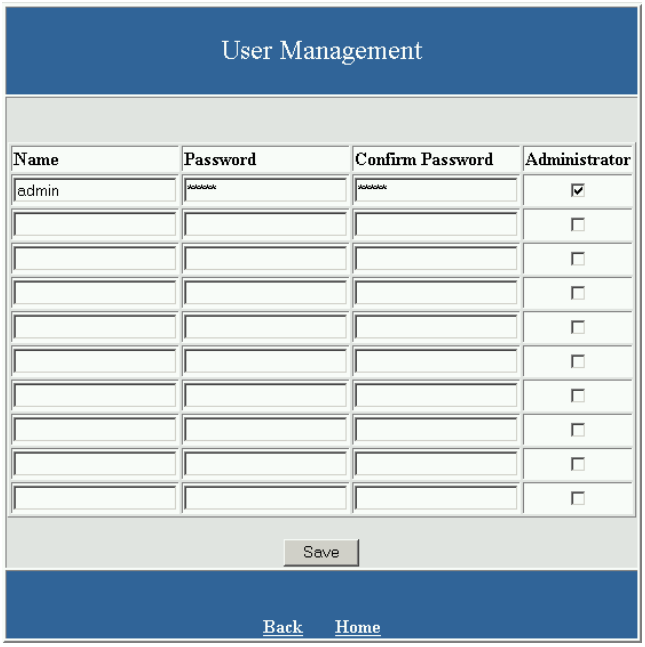
After Sentry II is connected, the default page will be displayed.



To begin the configuration, select ***User*** located in the ***Server*** section.

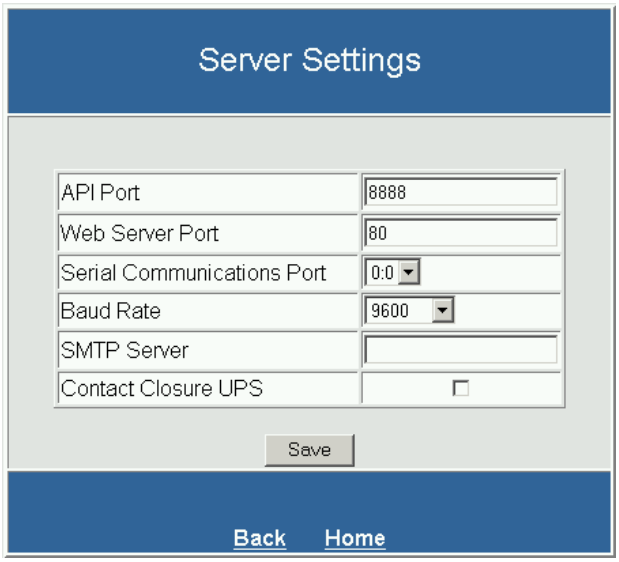
User Management

The User Management page is where the valid user accounts are set up for Sentry II. The default user is ***admin***, which has administrator privileges. Logging in under this account allows you to completing configure Sentry II. To add additional users, enter the ***Name***, ***Password***, ***Confirm Password***, select whether this user should have administrator privileges, and select ***Save***. NOTE: The information a user will be able to view is limited if an account is set up without administrator privileges.



Server Settings

The Server Settings page contains the configurable settings for the Sentry II server. If your server requires values other than the defaults, enter the correct values and select ***Save***. A message will be displayed confirming that the changes have been saved.



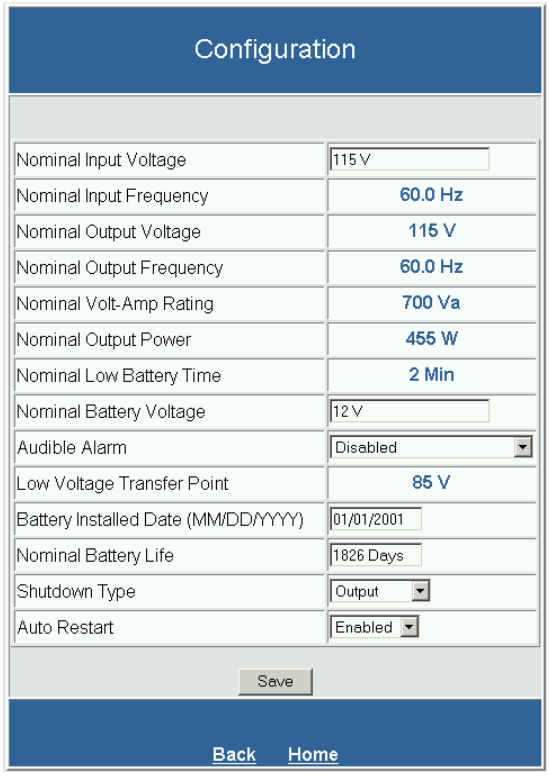
The following is a description of the fields contained on this page:

- **API Port** — Sentry II's API communications port. The default port 8888 may be changed if it conflicts with another service running on the computer. (NOTE: This port is used to communicate with all Sentry II Remote clients.)
- **Web Server Port** — Sentry II uses this port to communicate with a web browser. The default port 80 may be changed if it conflicts with another web server running on the computer.
- **Serial Communications Port** — Sentry II uses this port to communicate with the UPS. Select the port the UPS has been connected to.
- **Baud Rate** — Sentry II communicates with the UPS using this baud rate. This rate will be auto detected from the UPS when the Sentry II service is started. If not, please refer to the documentation provided with your UPS.
- **SMTP Server** — The SMTP server name or IP address supplied here will be used to send email notifications.
- **Contact Closure UPS** — Select this checkbox if the UPS supports contact closure and you would like Sentry II to use this mode. (NOTE: Units connecting to an AS400 computer will benefit most from this feature. Contact Closure requires a non-standard communications cable. Part # 35000015)

NOTE: If the UPS is connected to any com port other than com 1 the default page will not display until the required com port is selected and your web browser is restarted.

UPS Configuration

The Configuration page contains configurable and static settings for the attached UPS. If changes are required, enter the correct values and select ***Save***. A message will be displayed confirming that the changes have been saved.



The following is a description of the fields contained on this page:

- Nominal Input Voltage — The expected input voltage.
- Nominal Input Frequency — The input frequency provided by the UPS.
- Nominal Output Voltage — The output voltage provided by the UPS.
- Nominal Output Frequency — The output frequency provided by the UPS.
- Nominal Volt-Amp Rating — The volt-amp rating provided by the UPS.
- Nominal Output Power — The output power provided by the UPS.
- Nominal Low Battery Time — The low battery time provided by the UPS.
- Nominal Battery Voltage — The expected battery voltage.
- Audible Alarm — Enable or disable the audible alarm feature of the UPS.
- Low Voltage Transfer Point — The low voltage point at which the UPS begins to provide power.
- Battery Installed Date — The date which the UPS first started service. (User changeable field.)
- Nominal Battery Life — Estimated battery life of 3 years. (User changeable field.)
- Shutdown Type — Determines the shutdown mode for the UPS. (Default of "Output" is recommended.)
- Auto Restart — Enable or disable the automatic restart feature of the UPS. (Default of "Enabled" is recommended.)

NOTE: Some fields may not be supported or displayed by all UPS's.

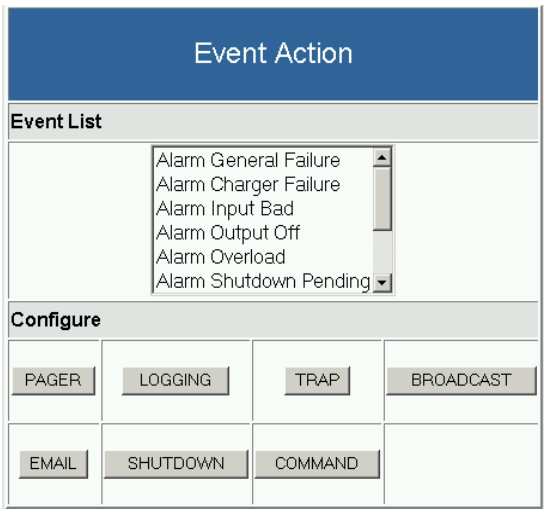
EVENT CONFIGURATION

Event Action

The event action page provides complete control over UPS system events. The available events vary by UPS model, however you can configure options for Paging, Logging, SNMP Traps, Broadcast, SMTP Email, Shutdown, and System Commands, for any available event. This allows you to take the appropriate action based on the event, such as sending a notification of the event to the administrator.

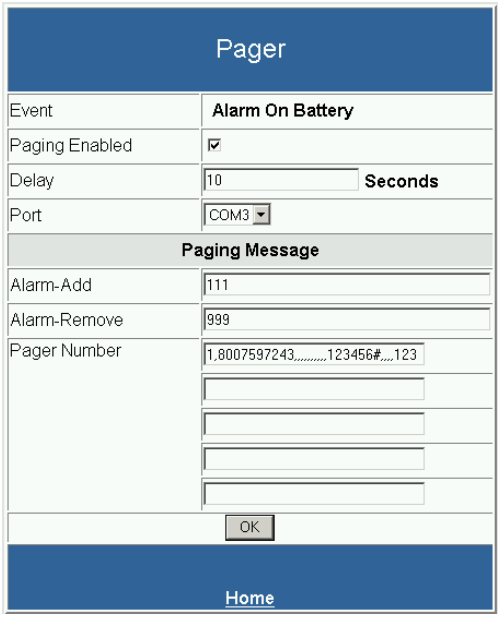
NOTE: Some options for actions are not available for all operating systems.

To configure an event, select an event from the Event List. Then, select the button for the type of action to take when the event occurs. The following sections describe how to set up each action.



Paging

You can configure Sentry II to use a third party paging system to send pages, to up to five people, when an event occurs. To avoid sending pages for events that last only a short time, enter a delay time. To set up paging for an event, select the ***Pager*** button. The following configuration page will be displayed. Enter the desired configuration and select the ***OK*** button. A message will be displayed confirming that the settings have been saved.



The following is a description of the fields contained on this page:

- Event — Displays the name of the event that is being configured.
- Paging Enabled — Select the checkbox to enable paging for this event. This option allows you to retain your settings whether the option is enabled or disabled.

- **Delay** — The amount of time in seconds, after the event occurs, before paging is performed. If the event is removed before the delay time is reached, the paging will be cancelled.
- **Port** — The dedicated serial communications port used when paging is performed. A modem must also be available and properly configured for this port.
- **Alarm-Add** — The numeric message sent, as the page, when an event is added.
- **Alarm-Remove** — The numeric message sent, as the page, when an event is removed.
- **Pager Number** — Up to five separate pages may be configured. Each field must contain only one paging phone number followed by any codes required by the paging service to complete the page.

  The phone number must contain any access numbers required for the phone system to gain access to an outside line, such as dialing 8 or 9. Each comma (,) represents three (3) seconds dialing pause time. This allows the modem to pause before sending a sequence of numbers to the paging system. There may be times, when a pause is required, before the paging system is ready to receive the next numeric command.

  It may be necessary to test the pause time until it is determined to be functioning properly. This may require an event to be manually triggered. See the ***UPS Control Options*** section to trigger an event.

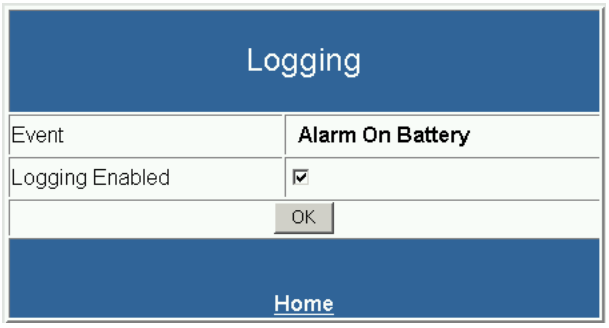
  Valid characters are limited to 0 through 9, comma (,) and the pound sign (#).

  An example pager number follows: 1,8007597243,,,,,123456#,,,
  The numeric 1 would be dialed.
  Followed by a 3 second pause.
  The numbers 8007597243 would be dialed.
  Followed by a 15 second pause.
  The numbers 123456 and # would be dialed.
  Followed by a 9 second pause.
  Then, the numeric add or remove alarm would be sent as the pager message.
  End of example.

Logging

You can configure Sentry II to log the event to the event log file. For instructions on how to view the event log, see the ***View Event Log*** section.

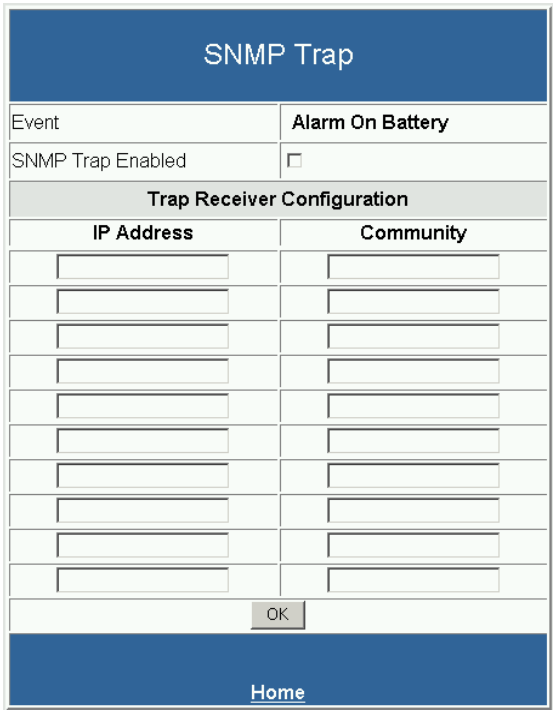
To set up logging for an event, select the ***Logging*** button. The following configuration page will be displayed.



Select the ***Logging Enabled*** checkbox to enable logging for the event, and select the ***OK*** button. A message will be displayed confirming that the settings have been saved.

SNMP Trap

You can configure Sentry II to send a SNMP trap, to up to 10 other computers on the network, when an event occurs. To set up a SNMP trap for an event, select the ***Trap*** button. The following configuration page will be displayed. Enter the desired configuration and select the ***OK*** button. A message will be displayed confirming the settings have been saved.



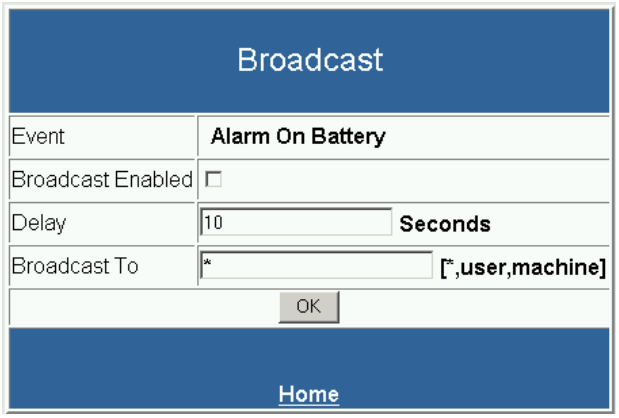
The following is a description of the fields contained on this page:

- Event — Displays the name of the event that is being configured.
- SNMP Trap Enabled — Select the checkbox to enable sending a trap for this event.
- IP Address — The IP address of the computer that will receive the trap. Up to 10 addresses may be entered, each in a separate field.
- Community — This is the community name used when sending the trap. (i.e. PUBLIC)

Broadcasting

You can configure Sentry II to broadcast a notification message when an event occurs. To avoid sending broadcasts for events that last only a short time, enter a delay time.

To set up broadcasting for an event, select the ***Broadcast*** button. The following configuration page will be displayed. Enter the desired configuration and select the ***OK*** button. A message will be displayed confirming the settings have been saved.

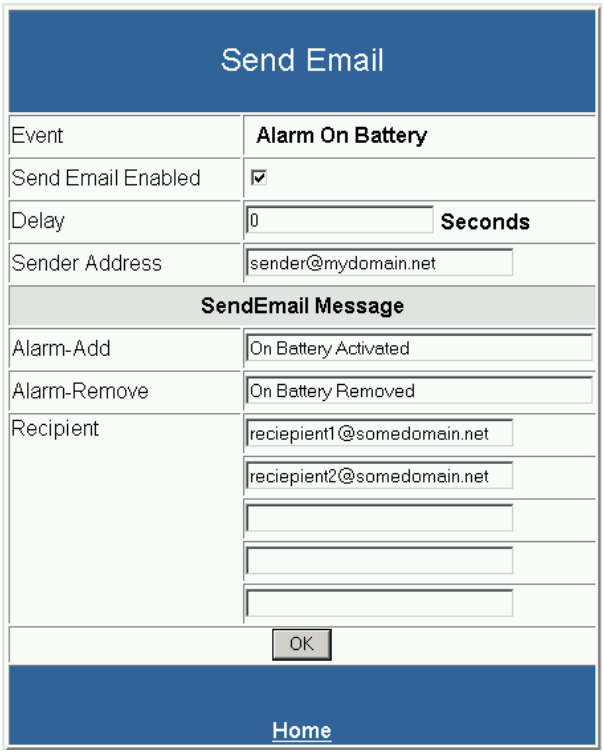


The following is a description of the fields contained on this page:

- Event — Displays the name of the event that is being configured.
- Broadcast Enabled — Select the checkbox to enable broadcasting for this event.
- Delay — The amount of time in seconds, after the event occurs, before broadcasting is performed. If the event is removed before the delay time is reached, the broadcasting will be cancelled.
- For Unix only — All of the current network connections to the Unix server will be sent a broadcast message.
- For Netware only — All of the current network connections to the Netware server will be sent a broadcast message.
- For Windows 95/98/ME only — (NOT viewable) Only NT/2000 servers can send broadcast messages. On Windows 95/98/ME machines, winpopup may be used to receive broadcast messages.
- For Windows NT/2000 only — A space delimited list of recipients. If an asterisk (*) is entered, all current connections on the logged in domain will be sent a broadcast message. Otherwise, the specified user name and/or computer name will be sent a broadcast message.

Email Notification

You can configure Sentry II to send an email message to up to five different email addresses when an event occurs. To avoid sending emails for events that last only a short time, enter a delay time. To set up email notification for an event, select the ***Email*** button. The following configuration page will be displayed. Enter the desired configuration and select the ***OK*** button. A message will be displayed confirming the settings have been saved.



The following is a description of the fields contained on this page:

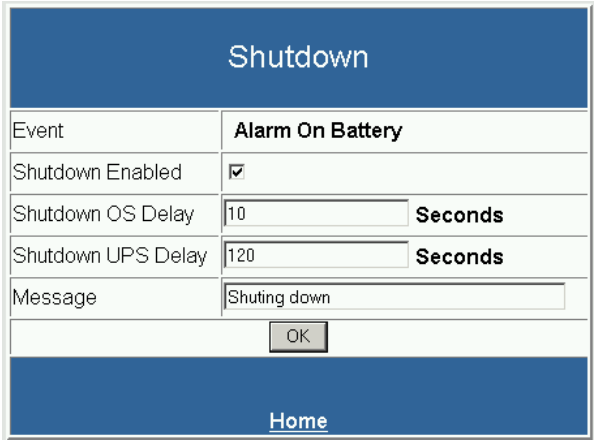
- Event — Displays the name of the event that is being configured.
- Send Email Enabled — Select the checkbox to enable sending email notifications for this event.
- Delay — The amount of time in seconds, after the event occurs, before sending email notifications. If the event is removed before the delay time is reached, sending email will be cancelled.
- Sender Address — The email address of the default mail account used as a reference to the sender.
- Alarm-Add — The message sent, as the body of the email, when an event is added.
- Alarm-Remove — The message sent, as the body of the email, when an event is removed.
- Recipient — The SMTP email address of the recipient. Up to five (5) recipients may be entered in separate fields. The address must be entered in the default notation (i.e. recipient@somedomain.net)

UPS and/or Operating System Shutdown

You can configure Sentry II to shutdown the UPS and/or Operating System, when an event occurs that warrants this action. To avoid shutting down the system for events that last only a short time, enter a delay time.

To set up shutdown for an event, select the ***Shutdown*** button. The following configuration page will be displayed.

NOTE: The Sentry II Remote client may be used to extend the system shutdown feature to multiple servers/workstations in a network.



The following is a description of the fields contained on this page:

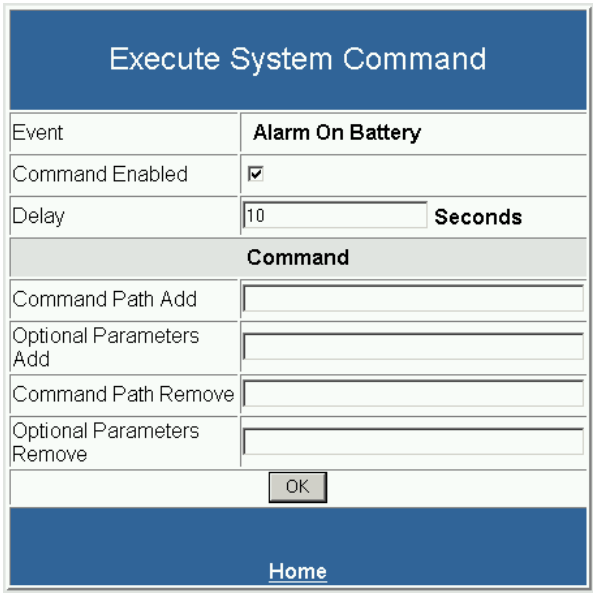
- Event — Displays the name of the event that is being configured.
- Shutdown Enabled — Select the checkbox to enable shutdown for this event.
- Shutdown OS Delay — The amount of time in seconds, after the event occurs, before the operating system will be shutdown. Enter –1 to disable shutting down the operating system. If the event is removed before the delay time is reached, the action will be cancelled.
- Shutdown UPS Delay — The amount of time in seconds, after the event occurs, before the UPS will be shutdown. If the event is removed before the delay time is reached, the action will be cancelled.
- Message — Shutdown message.

NOTE: If you are using the Sentry II Remote agent this event MUST be enabled. All Remote agents need to be configured to shutdown before the Sentry II Server. This is accomplished with the **Shutdown OS Delay** and the **Shutdown UPS Delay** fields.

Run a System Command

You can configure Sentry II to run an operating system command, when an event occurs. To avoid running a system command for events that last only a short time, enter a delay time.

To set up a system command for an event, select the ***Command*** button. The following configuration page will be displayed.



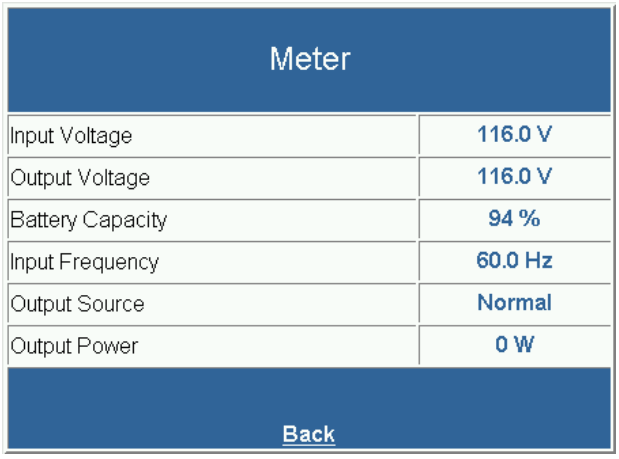
The following is a description of the fields contained on this page:

- Event — Displays the name of the event that is being configured.
- Command Enabled — Select the checkbox to enable running a system command for this event.
- Delay — The amount of time in seconds, after the event occurs, before the system command will be executed. If the event is removed before the delay time is reached, the system command will be cancelled.
- Command Path Add — The path and system command to execute when the event is added.
- Optional Parameters Add — Parameters to pass to the system command.
- Command Path Remove — The path and system command to execute when the event is removed.
- Optional Parameters Remove — Parameters to pass to the system command.

MONITORING

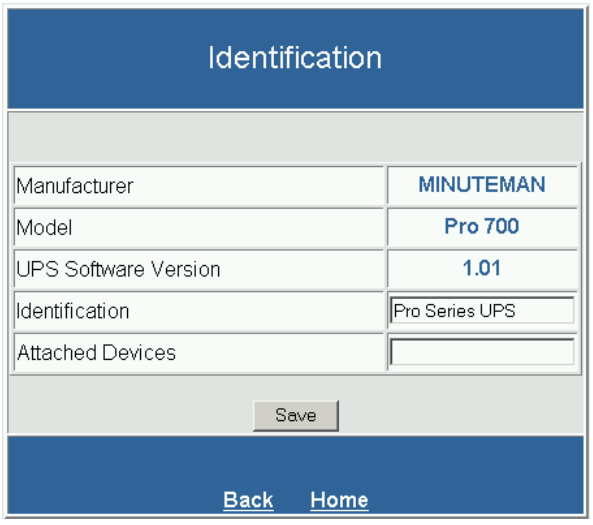
Meter

The meter page displays current meter readings from the UPS. This allows you to view a quick snapshot of the status of the UPS.



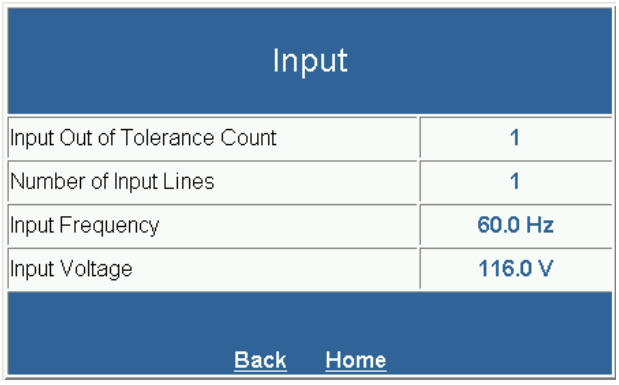
Identification

The identification page displays the UPS model information. An Identification description and Attached Devices may be entered here. To save any changes, select ***Save***. A message will be displayed confirming that the changes have been saved.



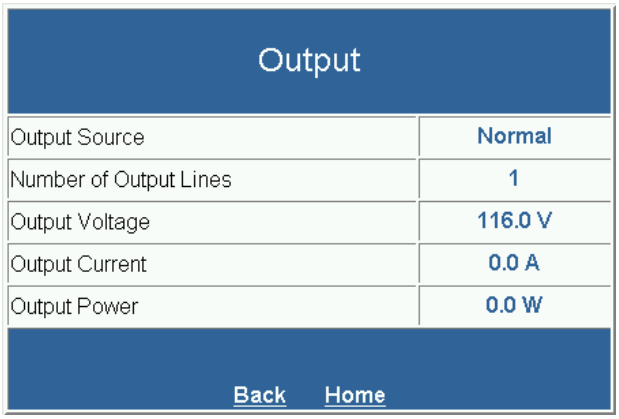
Input

The input page displays the current state of the input power to the UPS. Refer to the documentation provided with the UPS for more details on the information provided on this page.



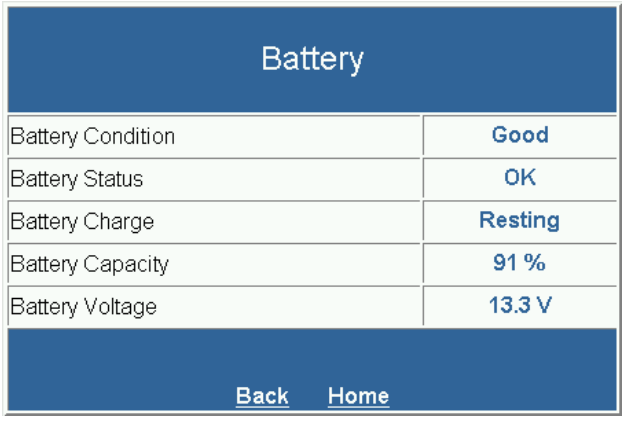
Output

The output page displays the current state of the output power from the UPS. Refer to the documentation provided with the UPS for more details on the information provided on this page.



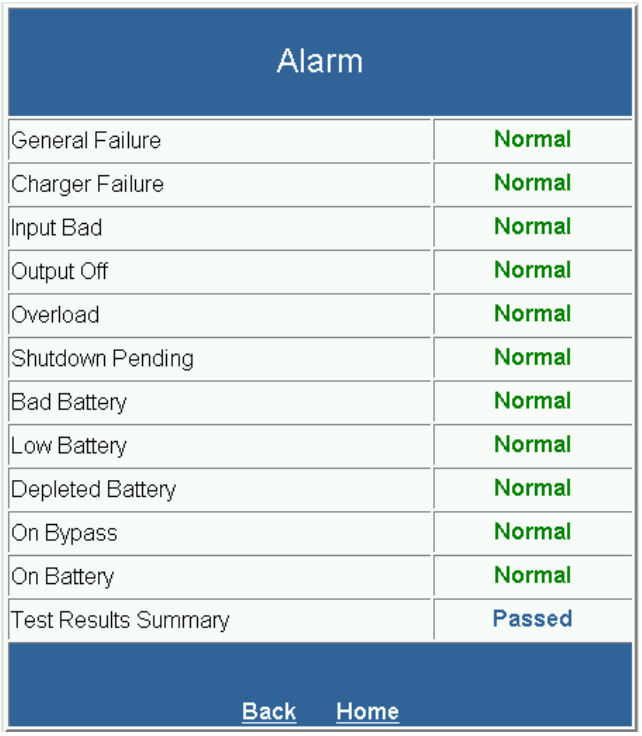
Battery

The battery page displays the current state of the UPS battery. Refer to the documentation provided with the UPS for more details on the information provided on this page.



Alarm

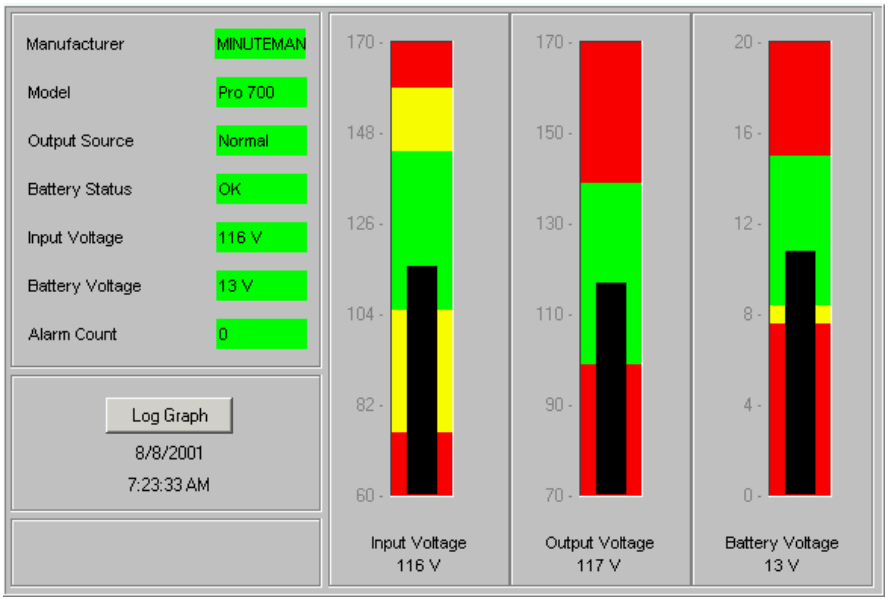
The alarm page displays the current state of the alarms supported by the UPS.



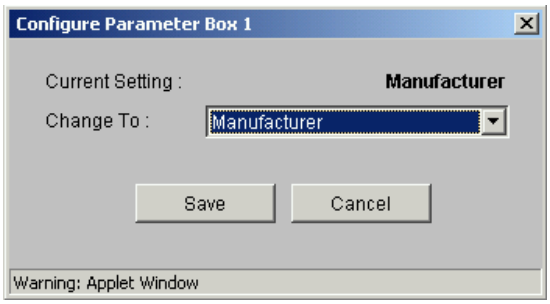
View Graphic

The view graphic page provides a current view of UPS values. The meters show nominal value ranges in green, the thresholds in yellow, and invalid values in red.

The UPS current values and meter graphs are fully configurable and can display any values provided by the UPS.

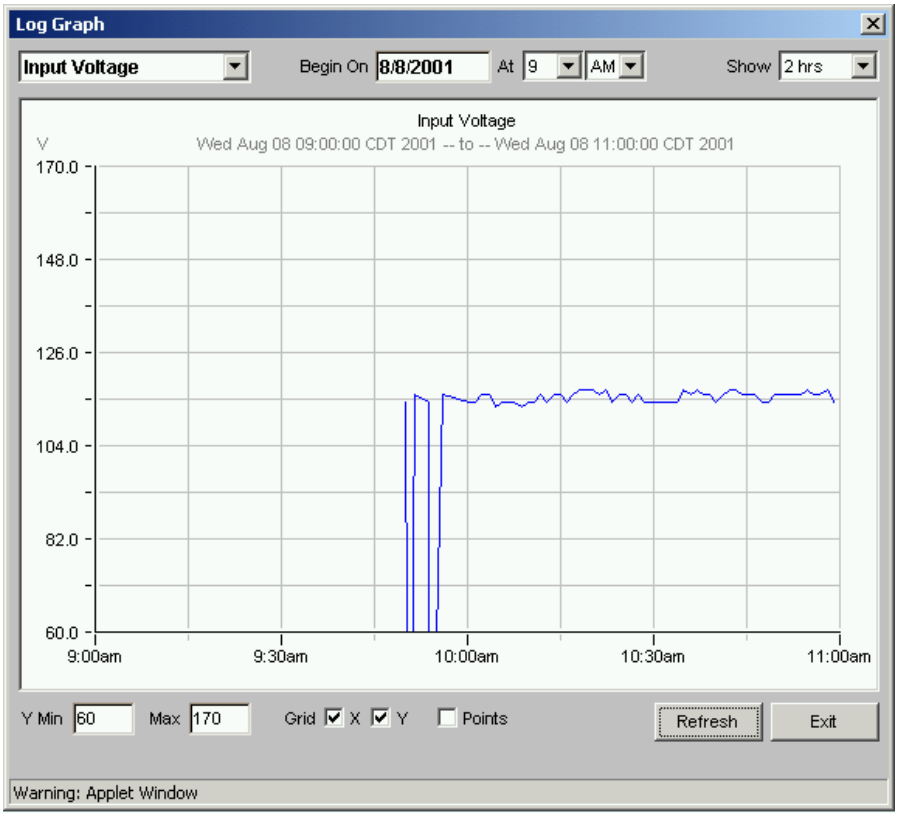


If you would like to see other values, changing them is easy. To change a value or a meter, click on the title of the value or meter and the following window will be displayed.



Select a new value from the drop-down list and select ***Save***. The value will automatically be updated on the view graphic page.

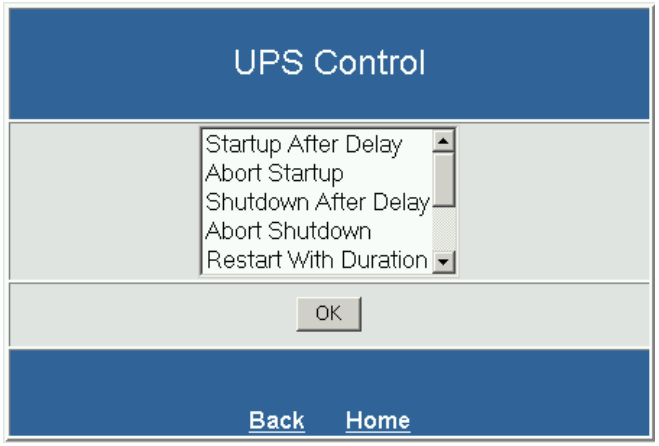
You can also view the log graph by selecting the ***Log Graph*** button. The graph is fully configurable. You can select the UPS value, begin date, and time range to view the customized graph. Select the ***Refresh*** button to view the changes. You can also specify the Y minimum and maximum values, whether the X and/or Y grid lines are displayed, and whether lines or points are graphed. Select ***Exit*** to close the log graph window.



UPS CONTROL OPTIONS

Control

The control page provides the interface for controlling various options provided by the UPS. You can control startup, shutdown, restart, and testing options. Not all options are supported or displayed by all UPS's.



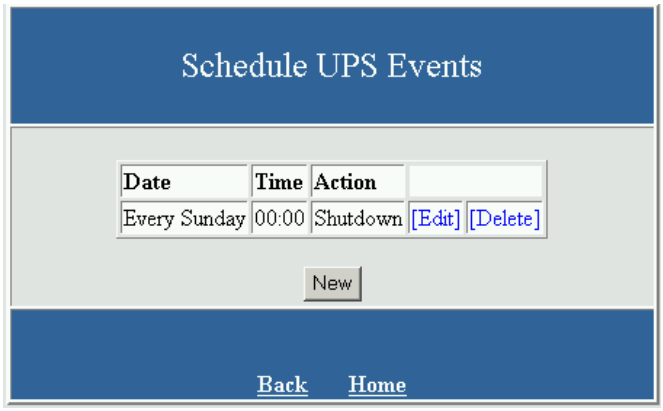
To perform an option, select the option and select the ***OK*** button. A perform command page will be displayed displaying available configuration information for the option. Enter the desired configuration information, if any, and select the ***Perform Command*** button. A message will be displayed confirming the command has been performed successfully.

SCHEDULING

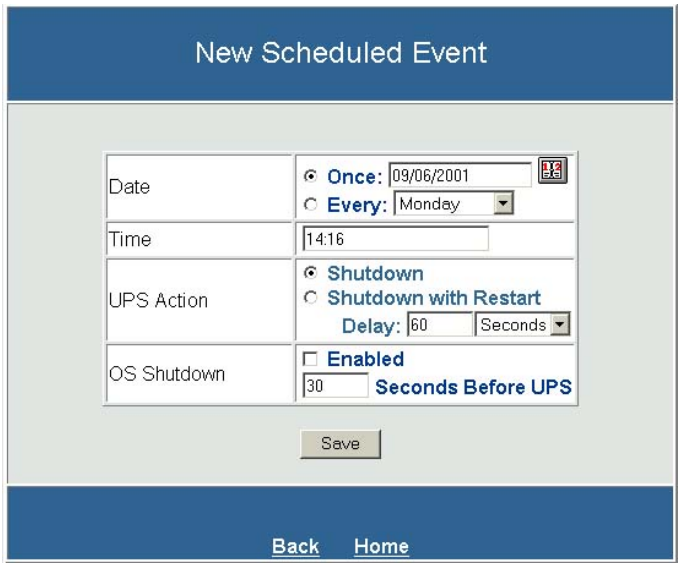
Schedule

The schedule page provides the interface for scheduling the date and time when the shutdown and restart UPS events should occur.

To add a new schedule, select the ***New*** button. To make changes to a current schedule, select ***[Edit]***. And to remove a schedule, select ***[Delete]***.



After selecting the ***New*** button or ***[Edit]***, the following page will be displayed. Select the desired shutdown and restart configuration and select the ***Save*** button.



The following is a description of the fields contained on this page:

- Date — The date when the event should occur. The date may easily be selected by clicking on the date icon.
- Time — The time when the event should occur on the specified date.
- UPS Action — The UPS shutdown and restart settings. If **Shutdown with Restart** is selected, the UPS will shutdown and then restart after n number of seconds.
- OS Shutdown — The operating system shutdown options. If enabled, the operating system will shutdown n number of seconds before the UPS is shutdown.

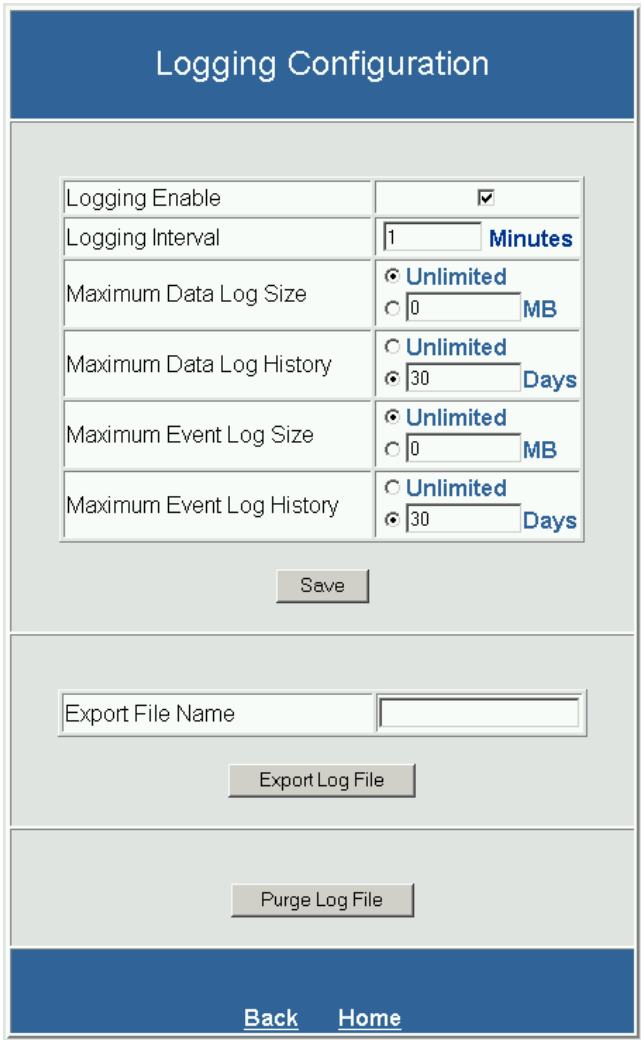
NOTE: Newer computer systems support the automatic power management feature. This feature enables the computer to power off automatically at shutdown. If the **Shutdown with Restart** action is selected and your computer supports this feature your computer will NOT power on. Please refer to the computer manufacture's Users Manual for instructions on changing the power management feature from within your system's BIOS.

DATA & EVENT LOGGING

Log Configuration

The log configuration page contains the configurable settings for logging UPS readings and events on a regular basis. It also provides options for exporting and purging the log file. To configure the logging, enter the desired settings and select the ***Save*** button. A message will be displayed confirming that the changes have been saved.

To export the log file, enter the path and file name to exported to and select the ***Export Log File*** button. The log will export as a comma-delimited text file. To purge the log file, select the Purge Log File button.



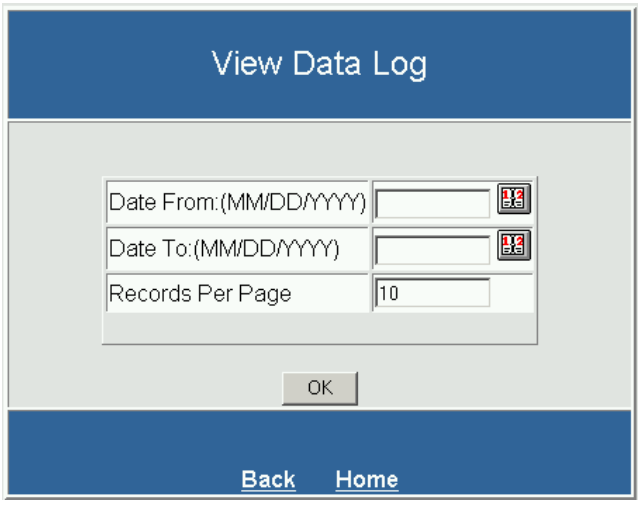
The following is a description of the fields contained on this page:

- Logging Enable — Select the checkbox to enable the logging of UPS readings and events.
- Logging Interval — How often the logging will occur, in minutes.
- Maximum Data Log Size — Maximum size of the data log file, either unlimited or a specified number of megabytes.
- Maximum Data Log History — Maximum number of days to keep data log entries, either unlimited or a specified number of days.
- Maximum Event Log Size — Maximum size of the event log file, either unlimited or a specified number of megabytes.
- Maximum Event Log History — Maximum number of days to keep event log entries, either unlimited or a specified number of days.
- Export File Name — The file name and path where the log may be exported to.

View Data Log

The view data log page allows you to select a date range of UPS log records to view. Leaving the date fields blank will display all records.

To display the log, after selecting the desired date range, select the ***OK*** button.



A page similar to the following will be displayed.

NOTE: The data fields contained in the log may vary depending on the UPS model connected.

View Data Log

1/1

Date	Time	Battery Status	Battery Capacity	Battery Voltage	Input Bad Count	Input Frequency	Input Voltage	Output Source	Output Voltage	Output Current	Output Power	Test Results Summary	Battery Condition	Battery Charge State
08/06/2001	07:10:57	OK	50	12	0	60	116	Normal	114	0	0	Passed	Good	Charging
08/06/2001	07:11:09	OK	50	12	0	60	116	Normal	114	0	0	Passed	Good	Charging
08/06/2001	07:26:09	OK	51	12	0	60	116	Normal	114	0	0	Passed	Good	Charging
08/06/2001	07:41:11	OK	51	12	0	60	114	Normal	114	0	0	Passed	Good	Charging
08/06/2001	07:56:13	OK	53	12	0	60	114	Normal	113	0	0	Passed	Good	Charging
08/06/2001	08:11:15	OK	55	12	0	60	113	Normal	114	0	0	Passed	Good	Charging
08/06/2001	08:26:17	OK	56	12	0	60	113	Normal	113	0	0	Passed	Good	Charging
08/06/2001	08:41:19	OK	56	12	0	60	113	Normal	112	0	0	Passed	Good	Charging
08/06/2001	08:56:22	OK	58	12	0	60	113	Normal	114	0	0	Passed	Good	Charging
08/06/2001	09:11:23	OK	60	12	0	60	112	Normal	113	0	0	Passed	Good	Charging

First Previous Next Last

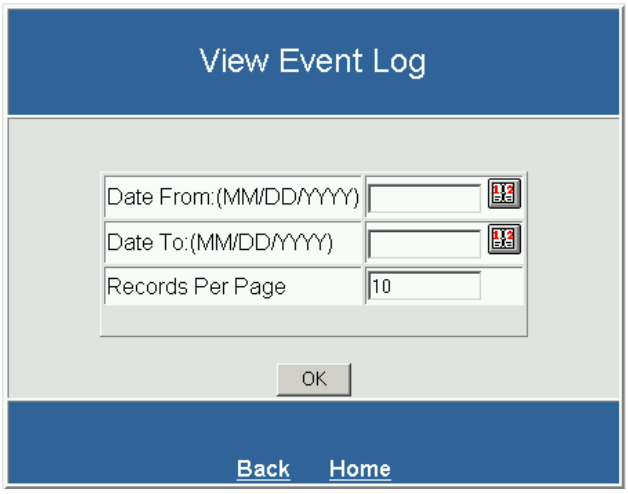
Home

Select the ***First*** button to display the first page of the log. Select ***Previous*** to display the previous page. Select ***Next*** to display the next page of the log. And select ***Last*** to view the last page of the log.

View Event Log

The view event log page allows you to select a date range of event log records to view. Leaving the date fields blank will display all records.

To display the log, after selecting the desired date range, select the ***OK*** button.



A page similar to the following will be displayed.

Select the ***First*** button to display the first page of the log. Select ***Previous*** to display the previous page. Select ***Next*** to display the next page of the log. And select ***Last*** to view the last page of the log.

SENTRY II REMOTE

Sentry II Remote was designed to extend the system shutdown capability to multiple servers/workstations in a network. The Remote agent is available for Windows, Netware, and Unix. This gives the user cross-platform shutdown capabilities.

System Requirements

1. To use Sentry II Remote, your system must be running one of the following operating systems:
   - Windows 95/98/ME
   - Windows NT/2000
   - SCO UnixWare/Open Desktop
   - HP-UX
   - IBM AIX
   - Red Hat Linux
   - Novell Netware 4.x, 5.x

2. The Sentry II Remote client MUST be on the same network as the server/workstation hosting the Sentry II Server.

3. NO other equipment is required! All Remote Clients can be automatically shutdown by one event from one MINUTEMAN UPS.

Windows Client

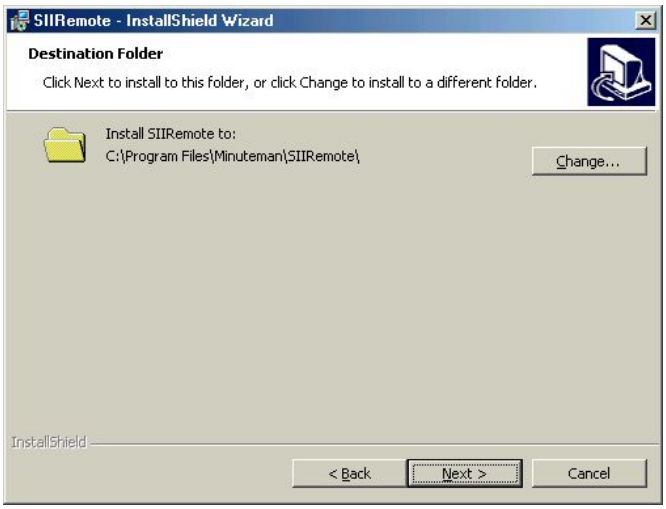
Installation

Step 1. Insert the Sentry II Installation CD and select **Install Software** from the menu. If the autorun feature does not work, run **setup.exe** located in the **{***cdrom drive***}:**\\RemoteClient\Win32 folder on the Sentry II Installation CD.

NOTE: When using a Windows NT/2000 server, logon as the administrator to ensure that you have full read and write privileges.

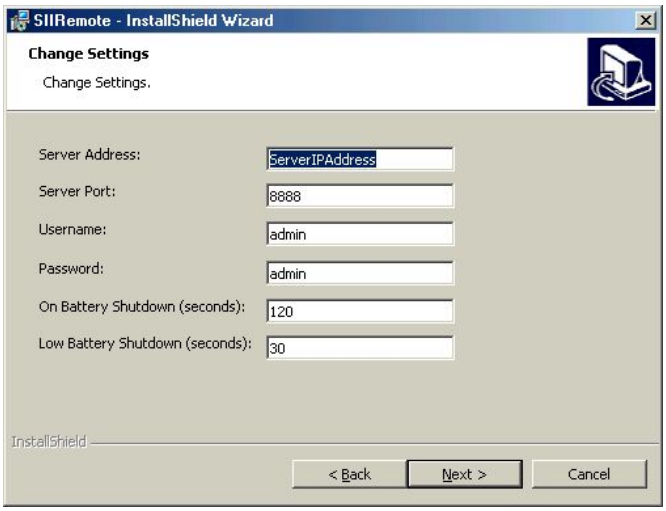
Step 2. The InstallShield Wizard will guide you through the installation process.

Step 3. The default install location is recommended.



Step 4. Specify the desired setting for the Sentry II Remote client.

NOTE: This splash screen is only available during the install process. To change these settings after installation, you may edit the C:\Program Files\Minuteman\SIIRemote\SIIRemote.ini file.



The following is a description of the fields contained on this page:

- Server Address — The Sentry II Server's IP address.
- Server Port — The API port number of the Sentry II Server. (See ***Server Settings*** on page 13)
- Username — The default is admin. This setting must coincide with the defined Sentry II users list. (See ***User Management*** on page 13)
- Password — The default is admin. This setting must coincide with the defined Sentry II passwords list. (See ***User Management*** on page 13)
- On Battery Shutdown — The amount of time in seconds, after the event occurs, before the Remote Client will be shutdown. If the event is removed before the delay time is reached, the action will be cancelled. (See ***UPS and/or Operating System Shutdown*** on page 20)
- Low Battery Shutdown — The amount of time in seconds, after the event occurs, before the Remote Client will be shutdown. (See ***UPS and/or Operating System Shutdown*** on page 20)

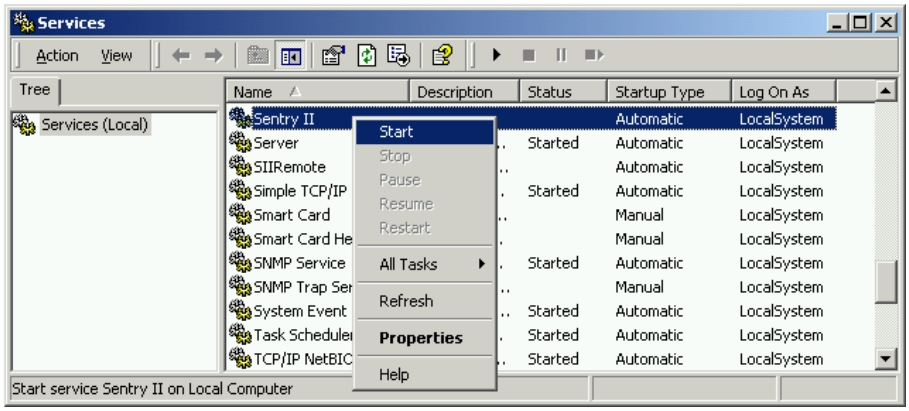
NOTE: All Remote clients need to be configured to shutdown before the Sentry II Server.

Starting Sentry II Services

If, at the end of the installation, you selected to start Sentry II, then Sentry II should be running. If not, to start Sentry II, perform the following steps:

- Windows 95/98/ME
  1. Click the Windows **Start** button and select **Programs / Sentry II / SIIRemote**.
  2. Sentry II Remote is a hidden service and may only be seen by pressing **Ctrl-Alt-Delete**.

- Windows NT/2000
  1. Start the Windows ***Services*** application.
  2. From the Windows ***Start Menu***, select the ***Settings*** menu, and then select the ***Control Panel*** menu.
  3. Select the ***Administrative Tools*** folder, and then select the ***Services*** application.
  4. Locate the ***Sentry II Remote*** service in the services list.
  5. Right click ***Sentry II Remote*** and select ***Start*** from the popup menu.



Novell Netware Client

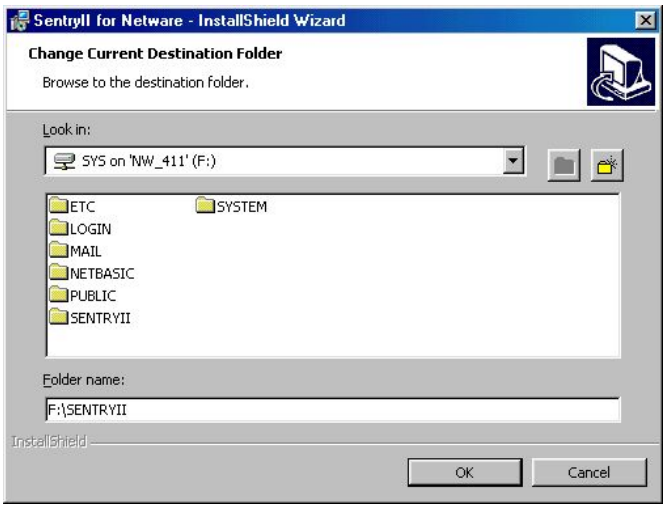
Installation

Step 1. The Sentry II Remote must be installed from a Windows client computer. This should be done in exactly the same manner as the Sentry II Server installation. (see **Novell Netware | Install Procedure** page 7)

Step 2. Insert the Sentry II Installation CD and select **Install Software** from the menu. If the autorun feature does not work, run **setup.exe** located in the **{***cdrom drive***}:**\\RemoteClient\Netware folder on the Sentry II Installation CD.

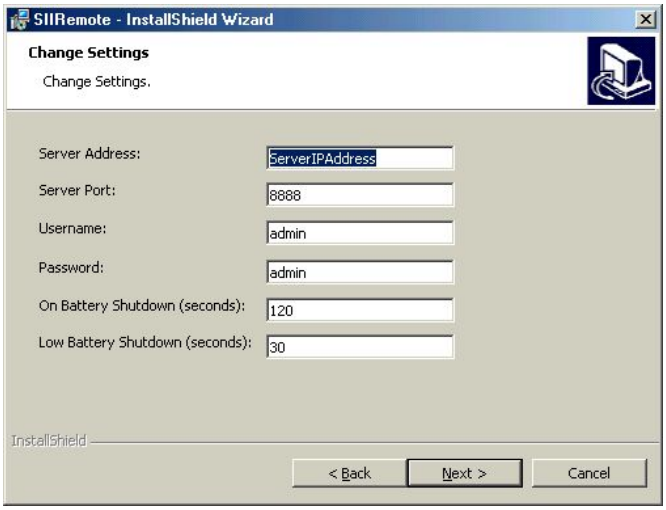
Step 3. The InstallShield Wizard will guide you through the installation process.

Step 4. When prompted for the Sentry II installation folder, select a drive letter mapped to the SYS volume of your Novell server and enter a new folder name, a maximum of 8 characters may be used, where the software will be installed. (For example, **F:\SentryII**.)



Step 5. Specify the desired setting for the Sentry II Remote client.

NOTE: This splash screen is only available during the install process. To change these settings after installation, you may edit the ***InstallFolder***\SIIRemote\SIIRemote.ini file.



The following is a description of the fields contained on this page:

- Server Address — The Sentry II Server's IP address.
- Server Port — The API port number of the Sentry II Server. (See ***Server Settings*** on page 13)
- Username — The default is admin. This setting must coincide with the defined Sentry II users list. (See ***User Management*** on page 13)

- Password — The default is admin. This setting must coincide with the defined Sentry II passwords list. (See ***User Management*** on page 13)
- On Battery Shutdown — The amount of time in seconds, after the event occurs, before the Remote Client will be shutdown. If the event is removed before the delay time is reached, the action will be cancelled. (See ***UPS and/or Operating System Shutdown*** on page 20)
- Low Battery Shutdown — The amount of time in seconds, after the event occurs, before the Remote Client will be shutdown. (See ***UPS and/or Operating System Shutdown*** on page 20)

NOTE: All Remote clients need to be configured to shutdown before the Sentry II Server.

Starting Sentry II Services

From the Novell server, start Sentry II Remote by entering the following commands at the console prompt: (NOTE: replace ***InstallFolder*** with the folder name entered in step 4)

LOAD SYS:***InstallFolder***\SIIREMOTE\S2REMOTE.NLM

The Sentry II Remote client should now be executing on the Novell Netware server. Within a few minutes, you should see the following messages on the Sentry II display:

Connecting to Server...
Successfully connected.

Sentry II Remote is now running.

Unix Client

Installation

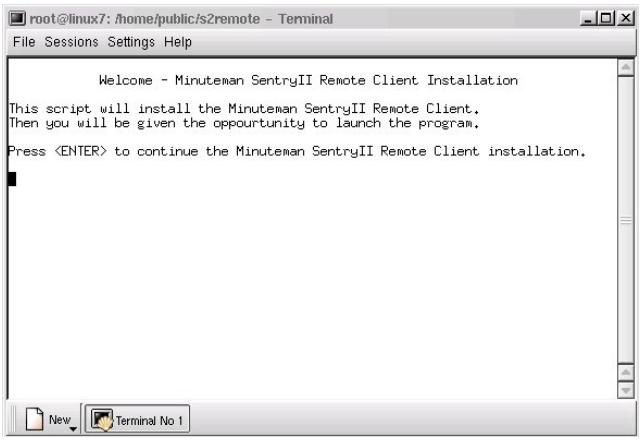
Step 1. You must be logged in to the server as root to ensure that you have full read and write privileges.

- Auto Install: Insert the Sentry II Installation CD into the drive. Mount the CD-ROM drive. Execute the **install** script located in the \RemoteClient\Unix folder on the Sentry II Installation CD.

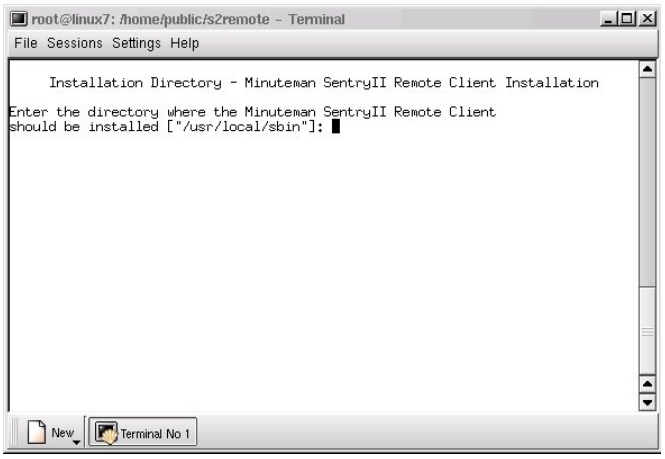
KNOWN ISSUE: The KDE desktop environment running with the Konqueror web browser does NOT work properly with install scripts. For this setup, please use the Manual Install listed below.

- Manual Install: Insert the Sentry II Installation CD into the drive. Mount the CD-ROM drive. Open a terminal windows and go to the **mnt/cdrom/RemoteClient/Unix** folder. Type **./install** at the command prompt to begin the install process.

Step 2. The install script will begin.

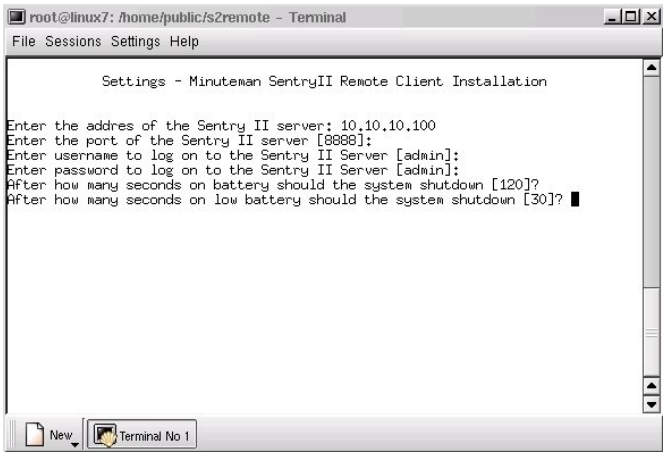

root@linux7: /home/public/s2remote - Terminal
File Sessions Settings Help
Welcome - Minuteman SentryII Remote Client Installation
This script will install the Minuteman SentryII Remote Client.
Then you will be given the oppourtunity to launch the program.
Press <ENTER> to continue the Minuteman SentryII Remote Client installation.
New
Terminal No 1

Step 3. All default install locations are recommended.


root@linux7: /home/public/s2remote - Terminal
File Sessions Settings Help
Installation Directory - Minuteman SentryII Remote Client Installation
Enter the directory where the Minuteman SentryII Remote Client
should be installed ["/usr/local/sbin"]:
New
Terminal No 1

Step 4. Specify the desired setting for the Sentry II Remote client.

NOTE: This splash screen is only available during the install process. To change these settings after installation, you may edit the **usr/local/sbin/**SIIRemote.ini file.


root@linux7: /home/public/s2remote - Terminal
File Sessions Settings Help
Settings - Minuteman SentryII Remote Client Installation
Enter the addres of the Sentry II server: 10.10.10.100
Enter the port of the Sentry II server [8888]:
Enter username to log on to the Sentry II Server [admin]:
Enter password to log on to the Sentry II Server [admin]:
After how many seconds on battery should the system shutdown [120]?
After how many seconds on low battery should the system shutdown [30]?
New
Terminal No 1

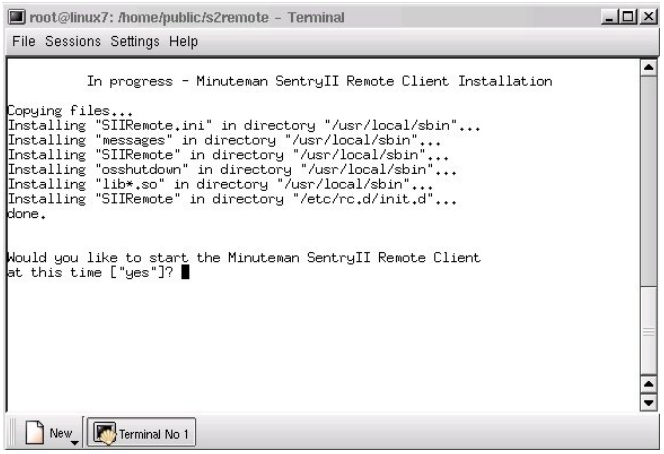
The following is a description of the fields contained on this page:

- Server Address — The Sentry II Server's IP address.
- Server Port — The API port number of the Sentry II Server. (See ***Server Settings*** on page 13)
- Username — The default is admin. This setting must coincide with the defined Sentry II users list. (See ***User Management*** on page 13)
- Password — The default is admin. This setting must coincide with the defined Sentry II passwords list. (See ***User Management*** on page 13)
- On Battery Shutdown — The amount of time in seconds, after the event occurs, before the Remote Client will be shutdown. If the event is removed before the delay time is reached, the action will be cancelled. (See ***UPS and/or Operating System Shutdown*** on page 20)
- Low Battery Shutdown — The amount of time in seconds, after the event occurs, before the Remote Client will be shutdown. (See ***UPS and/or Operating System Shutdown*** on page 20)

NOTE: All Remote clients need to be configured to shutdown before the Sentry II Server.

Starting Sentry II Services

If, at the end of the installation, you selected to start Sentry II, then Sentry II should be running.


root@linux7: /home/public/s2remote - Terminal
File Sessions Settings Help
In progress - Minuteman SentryII Remote Client Installation
Copying files...
Installing "SIIRemote.ini" in directory "/usr/local/sbin"...
Installing "messages" in directory "/usr/local/sbin"...
Installing "SIIRemote" in directory "/usr/local/sbin"...
Installing "osshutdown" in directory "/usr/local/sbin"...
Installing "lib*.so" in directory "/usr/local/sbin"...
Installing "SIIRemote" in directory "/etc/rc.d/init.d"...
done.
Would you like to start the Minuteman SentryII Remote Client
at this time ["yes"]?
New
Terminal No 1

If not, please perform the following steps:
To start Sentry II, execute the following commands for your platform:

- HP-UX
  1. cd /sbin/init.d
  2. SIIRemot start

- SCO UnixWare / Open Desktop
  1. cd /etc/init.d
  2. SentryII start

- IBM AIX
  1. cd /etc/init.d
  2. SentryII start

- Red Hat Linux
  1. cd /etc/rc.d/init.d
  2. SentryII start